

PC9477BSEQ LISTING.APP.txt
SEQUENCE LISTING

<110> Lanfear, Jeremy
Robas, Nicola M.

<120> PHOSPHODIESTERASE ENZYMES

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 Phe Cys Leu Ser His Gln Glu Val Ala Thr Ala Asn Leu Ala Trp Ala
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 Glu Lys Gly Ile Ala Gly Gln Val Ala Arg Thr Gly Glu Val Leu Asn
 340 345 350
 Ile Pro Asp Ala Tyr Ala Asp Pro Arg Phe Asn Arg Glu Val Asp Leu
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 370 375 380
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 385 390 395 400
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 405 410 415
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 Lys Ser Glu Asp Glu Ser Ala Pro Lys Glu Val Ser Arg Tyr Gln Asp
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 Thr Asn Met Gln Gly Val Val Tyr Glu Leu Asn Ser Tyr Ile Glu Gln
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 Arg Leu Asp Thr Gly Gly Asp Asn Gln Leu Leu Leu Tyr Glu Leu Ser
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 115 120 125
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Phe Asp Asn Ile Val Ala Ile Asp Ser Leu Leu Glu His Ile Met Ile
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 675 680 685
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 165 170 175
 Val Asp His Lys Asn Lys Glu Leu Tyr Ser Asp Leu Phe Asp Ile Gly
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<212> DNA

<213> Mouse

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PC9477BSEQ LISTING.APP.txt

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 35 40 45
 Ser Ala Glu Thr Val Glu Lys Trp Leu Lys Arg Lys Thr Asn Lys Ala
 50 55 60
 Lys Asp Glu Pro Ser Pro Lys Glu Val Ser Arg Tyr Gln Asp Thr Asn
 65 70 75 80
 Met Gln Gly Val Val Tyr Glu Leu Asn Ser Tyr Ile Glu Gln Arg Leu
 85 90 95
 Asp Thr Gly Gly Asp Asn His Leu Leu Leu Tyr Glu Leu Ser Ser Ile
 100 105 110
 Ile Arg Ile Ala Thr Lys Ala Asp Gly Phe Ala Leu Tyr Phe Leu Gly
 115 120 125
 Glu Cys Asn Asn Ser Leu Cys Val Phe Ile Pro Pro Gly Met Lys Glu
 130 135 140
 Gly Gln Pro Arg Leu Ile Pro Ala Gly Pro Ile Thr Gln Gly Thr Thr
 145 150 155 160
 Ile Ser Ala Tyr Val Ala Lys Ser Arg Lys Thr Leu Leu Val Glu Asp
 165 170 175
 Ile Leu Gly Asp Glu Arg Phe Pro Arg Gly Thr Gly Leu Glu Ser Gly
 180 185 190
 Thr Arg Ile Gln Ser Val Leu Cys Leu Pro Ile Val Thr Ala Ile Gly
 195 200 205
 Asp Leu Ile Gly Ile Leu Glu Leu Tyr Arg His Trp Gly Lys Glu Ala
 210 215 220
 Phe Cys Leu Ser His Gln Glu Val Ala Thr Ala Asn Leu Ala Trp Ala
 225 230 235 240
 Ser Val Ala Ile His Gln Val Gln Val Cys Arg Gly Leu Ala Lys Gln
 245 250 255
 Thr Glu Leu Asn Asp Phe Leu Leu Asp Val Ser Lys Thr Tyr Phe Asp
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 Asn Ile Val Ala Ile Asp Ser Leu Leu Glu His Ile Met Ile Tyr Ala

PC9477BSEQ LISTING.APP.txt
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Glu Gly Lys Pro Ile Phe Lys Lys Thr Lys Glu Ile Arg Phe Ser Ile
325 330 335

Glu Lys Gly Ile Ala Gly Gln Val Ala Arg Thr Gly Glu Val Leu Asn
340 345 350

Ile Pro Asp Ala Tyr Ala Asp Pro Arg Phe Asn Arg Glu Val Asp Leu
355 360 365

Tyr Thr Gly Tyr Thr Thr Arg Asn Ile Leu Cys Met Pro Ile Val Ser
370 375 380

Arg Gly Ser Val Ile Gly Val Val Gln Met Val Asn Lys Ile Ser Gly
385 390 395 400

Ser Ala Phe Ser Lys Thr Asp Glu Asn Asn Phe Lys Met Phe Ala Val
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Phe Cys Ala Leu Ala Leu His Cys Ala Asn Met Tyr His Arg Ile Arg
420 425 430

His Ser Glu Cys Ile Tyr Arg Val Thr Met Glu Lys Leu Ser Tyr His
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Ser Ile Cys Thr Ser Glu Glu Trp Gln Gly Leu Met Arg Phe Asn Leu
450 455 460

Pro Ala Arg Ile Cys Arg Asp Ile Glu Leu Phe His Phe Asp Ile Gly
465 470 475 480

Pro Phe Glu Asn Met Trp Pro Gly Ile Phe Val Tyr Met Ile His Arg
485 490 495

Ser Cys Gly Thr Ser Cys Phe Glu Leu Glu Lys Leu Cys Arg Phe Ile
500 505 510

Met Ser Val Lys Lys Asn Tyr Arg Arg Val Pro Tyr His Asn Trp Lys
515 520 525

His Ala Val Thr Val Ala His Cys Met Tyr Ala Ile Leu Gln Asn Asn
530 535 540

Asn Gly Leu Phe Thr Asp Leu Glu Arg Lys Gly Leu Leu Ile Ala Cys
545 550 555 560

Leu Cys His Asp Leu Asp His Arg Gly Phe Ser Asn Ser Tyr Leu Gln
565 570 575

Lys Phe Asp His Pro Leu Ala Ala Leu Tyr Ser Thr Ser Thr Met Glu
580 585 590

Gln His His Phe Ser Gln Thr Val Ser Ile Leu Gln Leu Glu Gly His
595 600 605

Asn Ile Phe Ser Thr Leu Ser Ser Ser Glu Tyr Glu Gln Val Leu Glu
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Ile Ile Arg Lys Ala Ile Ile Ala Thr Asp Leu Ala Leu Tyr Phe Gly
625 630 635 640

PC9477BSEQ LISTING.APP.txt

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 675 680 685
 Ala Asn Asp Ile Tyr Ala Glu Phe Trp Ala Glu Gly Asp Glu Met Lys
 690 695 700
 Lys Leu Gly Ile Gln Pro Ile Pro Met Met Asp Arg Asp Lys Arg Asp
 705 710 715 720
 Glu Val Pro Gln Gly Gln Leu Gly Phe Tyr Asn Ala Val Ala Ile Pro
 725 730 735
 Cys Tyr Thr Thr Leu Thr Gln Ile Leu Pro Pro Thr Glu Pro Leu Leu
 740 745 750
 Lys Ala Cys Arg Asp Asn Leu Asn Gln Trp Glu Lys Val Ile Arg Gly
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 Glu Cys Phe Leu Ser Pro Ser Leu Thr Asp Glu Lys Val Lys Ala Tyr
 20 25 30
 Leu Ser Leu His Pro Gln Val Leu Asp Glu Phe Val Ser Glu Ser Val
 35 40 45
 Ser Ala Glu Thr Val Glu Lys Trp Leu Lys Arg Lys Asn Asp Lys Ala
 50 55 60

PC9477BSEQ LISTING.APP.txt

Glu Asp Glu Pro Ser Pro Lys Glu Val Ser Arg Tyr Gln Asp Thr Asn
 65 70 75 80
 Met Gln Gly Val Val Tyr Glu Leu Asn Ser Tyr Ile Glu Gln Arg Leu
 85 90 95
 Asp Thr Gly Gly Asp Asn His Leu Leu Leu Tyr Glu Leu Asn Ser Ile
 100 105 110
 Ile Arg Ile Ala Thr Lys Ala Asp Gly Phe Ala Leu Tyr Phe Leu Gly
 115 120 125
 Glu Cys Asn Asn Ser Leu Cys Val Phe Thr Pro Pro Gly Met Lys Glu
 130 135 140
 Gly Gln Pro Arg Leu Ile Pro Ala Gly Pro Ile Thr Gln Gly Thr Thr
 145 150 155 160

<210> 18
 <211> 539
 <212> DNA
 <213> Rat

<400> 18
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 aacattctgt gtatgccat agtgagccgc ggcagcgtga tcggtgtggc gcaaattgggt 480
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 <211> 178
 <212> PRT
 <213> Rat

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Lys Thr Tyr Phe Asp Asn Ile Val Ala Ile Asp Ser Leu Leu Glu His
 35 40 45

Ile Met Ile Tyr Ala Lys Asn Leu Val Asn Ala Asp Arg Cys Ala Leu
 50 55 60

Phe Gln Val Asp His Lys Asn Lys Glu Leu Tyr Ser Asp Leu Phe Asp
 65 70 75 80

Ile Gly Glu Glu Lys Glu Gly Lys Pro Val Phe Lys Lys Thr Lys Glu
 85 90 95

Ile Arg Phe Ser Ile Glu Lys Gly Ile Ala Gly Gln Val Ala Arg Thr
 100 105 110

Gly Glu Val Leu Asn Ile Pro Asp Ala Tyr Ala Asp Pro Arg Phe Asn
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PC9477BSEQ LISTING.APP.txt
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Asn Lys Ile Ser Gly Ser Ala Phe Ser Lys Thr Asp Glu Asn Asn Phe
165 170 175

Lys Met